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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,371	10/25/2001	Anatoly Gosis	13076	2324

7590 02/24/2004

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EXAMINER

KEASEL, ERIC S

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 02/24/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/001,371

Applicant(s)

GOSIS ET AL.

Examiner

Eric Keasel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 17-30 is/are rejected.
- 7) ☒ Claim(s) 13-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date Z.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The specification is objected to as failing to provide clear support for the claim terminology. 37 CFR § 1.75(d)(1) requires that terms and phrases used in the claims find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description (see MPEP 608.01(o)). Specifically, the terms “smooth” and “unobstructed” do not appear in the specification.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-6 and 22-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 4, and 22 have been amended to add the limitations “smooth inner surface” and “so as to provide an unobstructed path for the product moving through”. Although applicant does not use the term “smooth” in the application as filed, a broad interpretation of “smooth” arguably has support. However, it should be noted that such an interpretation would clearly be disclosed by An and other references. More importantly, there is no support whatsoever in the

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application, as filed, for the limitation that there is an unobstructed path for the product moving through. There are many valves that are removed from the flow path in the open position to provide an unobstructed path, however, applicant has not disclosed one. The quarter-turn valve obstructs the flow path much less in the open position than it does in the closed position, but to call that an unobstructed flow path has no support in the application as filed. This is a new matter rejection.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-6 and 22-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 4, and 22 have been amended to add the limitation “so as to provide an unobstructed path for the product moving through”. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “unobstructed” in claims 1, 4, and 22 is used by the claim to mean “partially obstructed”, while the accepted meaning is “unobstructed.” The term is indefinite because the specification does not clearly redefine the term.

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6. In light of the above informalities, the claims have been examined as could best be understood by the examiner. The examiner's failure to apply prior art to any of the claims should not be construed as an indication of allowable subject matter.

*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6 (as best understood), 17, 18, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by An (US Patent Number 4,538,789).

Please note, regarding “smooth” and “unobstructed”, claims 1-6 are treated to the extent that the terminology can be supported. An discloses a valve assembly, comprising: a valve body (23) having a passage (40, 41) defining a first axis (44), and a bore defining a second axis (33) arranged generally coplanar with and normal to the first axis, the bore having an inner surface (28a, 28b) defined by an inner periphery thereof; and a valve structure (26) mounted in the bore for rotation about the second axis between a closed position, wherein the valve structure cooperates with the inner surface of the bore to obstruct movement of product through the passage, and an open position, wherein the valve structure is positioned relative to the inner surface of the bore so as to permit product movement through the passage; wherein a diameter of the bore is equal to or greater than a distance measured across any two diametrically opposed locations defined by a marginal edge of the passage (see Figs. 1 or 2 and note applicant's

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discussion of this limitation in the paragraph bridging pages 7 and 8 of the specification); the valve structure comprising a pair of radial flanges (26a, 26b) disposed at opposed ends with a solid rectangular web member (46) extending therebetween; wherein the valve structure includes a seal structure having a first seal portion (69) extending lengthwise on one side of the web member and generally parallel to the axis of rotation of the valve structure, a second seal portion (68) extending lengthwise on an opposite side of the web member and generally parallel to the axis of rotation of the valve structure, a third seal portion (65) extending around one of the radial flanges, and a fourth seal portion (66) extending around the other radial flange, thereby creating a seal between the valve structure and the bore to prevent movement of product therepast when the valve structure is in the closed position such that the valve structure and the bore create a straight line seal therebetween (see Fig. 2) so that a force created between the seal structure and the bore along the seal line does not substantially increase or vary as the seal structure rotates between the open and closed positions, thereby enhancing ergonomic operation of the valve structure; wherein the seal structure applies a wiping action to the cooperative inner surface of the bore as the valve structure moves between the open and closed positions (compare applicant's Fig. 6 to An's Fig. 4); wherein the web member and flanges each include an appropriate slot (73, 74, 70, 71) adapted to receive the respective seal portion; wherein the seal structure is made of a single piece of material (see column 3, lines 51-55); wherein the seal structure is an elastomeric seal (see column 3, line 56); further including stops for limiting movement of the valve structure between the open and closed positions (see column 5, lines 1-8); and further comprising a rotation assistance device (57) positioned on one end of one of the flanges to allow the valve structure to be rotated between the open and closed positions.

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9. Claims 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Rader (US Patent Number 3,108,778).

Rader discloses a valve assembly, comprising: a valve body having a passage (13, 14) defining a first axis, and a bore defining a second axis disposed in crossing relation to the first axis, the bore having an inner surface defined by an inner periphery thereof, a first open end, and a second spaced apart open end (see Fig. 1); and a valve structure (36) including a pair of radial flanges (38, 39) disposed at opposed ends with a solid web member extending therebetween, the radial flanges being configured to mount the valve structure within the bore for rotation about the second axis between a closed position, wherein the valve structure cooperates with the inner surface of the bore to obstruct movement of product through the passage, and an open position, wherein the valve structure is positioned relative to the inner surface of the bore so as to permit product movement through the passage, the radial flanges being structured and arranged so as to close the first and second open ends of the bore (see Fig. 1); wherein the web member is generally rectangular in shape; wherein a diameter of the bore is substantially equal to or greater than a distance measured across that portion of the passage which the valve structure is adapted to close; wherein the second axis is generally coplanar with and normal to the first axis; wherein the valve structure includes a seal structure extending lengthwise of and generally parallel to the axis of rotation of the valve structure, such that when the valve structure is in the closed position, the valve structure and the bore create a straight line seal therebetween so that a force created between the seal structure and the bore along the seal line does not substantially increase or vary as the seal structure rotates between the open and closed positions, thereby enhancing ergonomic operation of the valve structure; wherein the seal structure applies a wiping action to the



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cooperative inner surface of the bore as the valve structure moves between the open and closed positions.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over An in view of Ito et al. (US Patent Number 6,047,951).

An discloses a valve assembly, comprising: a valve body (23) having a passage (40, 41) defining a first axis (44), and a bore defining a second axis (33) arranged generally coplanar with and normal to the first axis, the bore having an inner surface (28a, 28b) defined by an inner periphery thereof; and a valve structure (26) mounted in the bore for rotation about the second

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axis between a closed position, wherein the valve structure cooperates with the inner surface of the bore to obstruct movement of product through the passage, and an open position, wherein the valve structure is positioned relative to the inner surface of the bore so as to permit product movement through the passage; wherein a diameter of the bore is equal to or greater than a distance measured across any two diametrically opposed locations defined by a marginal edge of the passage (see Figs. 1 or 2 and note applicant's discussion of this limitation in the paragraph bridging pages 7 and 8 of the specification); the valve structure comprising a pair of radial flanges (26a, 26b) disposed at opposed ends with a solid rectangular web member (46) extending therebetween; wherein the valve structure includes a seal structure having a first seal portion (69) extending lengthwise on one side of the web member and generally parallel to the axis of rotation of the valve structure, a second seal portion (68) extending lengthwise on an opposite side of the web member and generally parallel to the axis of rotation of the valve structure, a third seal portion (65) extending around one of the radial flanges, and a fourth seal portion (66) extending around the other radial flange, thereby creating a seal between the valve structure and the bore to prevent movement of product therepast when the valve structure is in the closed position such that the valve structure and the bore create a straight line seal therebetween (see Fig. 2) so that a force created between the seal structure and the bore along the seal line does not substantially increase or vary as the seal structure rotates between the open and closed positions, thereby enhancing ergonomic operation of the valve structure; wherein the seal structure applies a wiping action to the cooperative inner surface of the bore as the valve structure moves between the open and closed positions (compare applicant's Fig. 6 to An's Fig. 4); wherein the web member and flanges each include an appropriate slot (73, 74, 70, 71) adapted to receive the

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respective seal portion; wherein the seal structure is made of a single piece of material (see column 3, lines 51-55); wherein the seal structure is an elastomeric seal (see column 3, line 56); further including stops for limiting movement of the valve structure between the open and closed positions (see column 5, lines 1-8); and further comprising a rotation assistance device (57) positioned on one end of one of the flanges to allow the valve structure to be rotated between the open and closed positions.

An discloses the valve body and valve structure as being a molded material (see column 3, lines 57-59), but fails to disclose the more specific nylon material. Ito et al. disclose the use of nylon as the material choice for the both the valve body and valve structure in a similar rotary butterfly valve with an elastomeric seal (see column 4, lines 24-31). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the material selection of nylon for both the valve body and valve structure of An in order to integrally form the elastomeric seal and valve structure as taught by Ito et al. (see column 4, lines 13-31).

***Allowable Subject Matter***

12. Claims 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Response to Arguments***

13. Applicant's arguments with respect to claims 1-12 and 22-30 have been considered but are moot in view of the new ground(s) of rejection.

14. Applicant's arguments filed 21 Nov 2003 have been fully considered but they are not persuasive.

Applicant baldly argues that An does not disclose the new limitation added to the claims. The examiner disagrees. To the extent "smooth" and "unobstructed" can be supported by applicant's original disclosure, An clearly anticipates these limitations. Regarding the new limitations added to claim 17, An clearly discloses those limitations as well.

***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

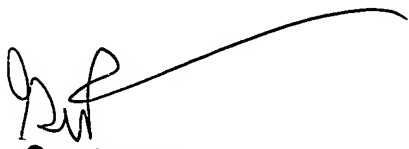
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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Keasel whose telephone number is (703) 308-6260. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (703) 308-2696. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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21 Feb 2004

  
Gene Mancene  
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